

0980804-120301
T0902T-40808650

REMARKS

Upon entry of this second preliminary amendment, claims 1 and 73-88 are in this application. New claims 73-88 are supported throughout the specification and by original claims 41, 45, 46, 55, 58, 68, and 69, and by the specification at pages 9, lines 12-13 and page 10, line 3 through page 12, line 6. These amendments have eliminated multiple dependencies. No new matter is added by this preliminary amendment.

The attached Abstract of the Disclosure is supported throughout the specification.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached Appendix A is captioned "**Version With Markings to Show Changes Made**".

Attached hereto is a clean copy of all of the pending claims. The attached Appendix B is captioned "**Clean Copy of Pending Claims Without Markings**".

Applicants respectfully request consideration of the pending claims.

The Director of the U. S. Patent and Trademark Office is hereby authorized to charge any deficiency in any fees due with the filing of this paper or credit any overpayment in any fees to our Deposit Account No. 08-3040.

Respectfully submitted,
HOWSON AND HOWSON
Attorneys for the Applicants

By Mary E. Bak
Mary E. Bak
Registration No. 31,215
Spring House Corporate Center
Box 457
Spring House, PA 19477
Telephone: (215) 540-9206
Telefacsimile: (215) 540-5818

Appendix B
Clean Copy of Pending Claims Without Markings

1. A peptide of the formula R^1 -Asp-Lys-Gly-X-Y-Leu-Pro-Arg-Pro-Thr-Pro-Pro-Arg-Pro-Ile-Tyr-X'-Y'- R^2 SEQ ID NO:1,
wherein R^1 is a moiety having a net positive charge;
wherein R^2 is selected from the group consisting of a free hydroxyl, an amide, an imide, a sugar, and a sequence of one or up to about 15 additional amino acids, optionally substituted with a free hydroxyl, an amide, an imide or a sugar, said additional amino acids being independently selected from L-configuration or D-configuration and said additional amino acids capable of cyclizing the peptide by bridging between the N- and C-termini thereof;
wherein X and Y form a dipeptide selected from the group consisting of Ser-Tyr and a dipeptide formed of naturally occurring amino acids or unnatural amino acids, said dipeptide resistant to cleavage; and
wherein X' and Y' form a dipeptide selected from the group consisting of Asn-Arg, and a dipeptide formed of naturally occurring amino acids or unnatural amino acids, said dipeptide resistant to cleavage.

73. A composition comprising multiple peptides according to claim 1.
74. The composition according to claim 73, comprising at least two peptides, wherein the second peptide is attached to any amino acid of the first peptide.
75. The composition according to claim 74, wherein additional peptides are attached to any amino acid of the other peptides in the composition.

09980804-120304
T0802T-10808660

76. The composition according to claim 73, comprising at least two peptides wherein the second or additional peptides is attached to a branched construct of the other peptides in the composition.

77. An isolated nucleic acid molecule comprising a nucleotide sequence encoding a peptide of claim 1 in operative association with a regulatory sequence directing the expression thereof in a host cell.

78. A host cell transfected or transformed with the molecule of claim 77.

79. A method of treating a mammalian infection comprising administering to a mammal having said infection an effective amount of a peptide of claim 1.

80. A method of treating a mammalian infection comprising administering to a mammal having said infection a low dose of a pharmaceutical composition comprising deglycosylated pyrrolicorin.

81. The method for identifying pharmaceutical compounds comprising:
performing a competitive assay with a microorganism susceptible to a peptide of claim 1 and at least one test compound; and
identifying said test compound which competitively displaces the binding of said peptide to a receptor on said microorganism.

82. A pharmaceutical composition comprising one or more of the peptides of claim 1 in a pharmaceutically acceptable carrier.

83. A pharmaceutical composition comprising one or more of the compositions of claim 73 in a pharmaceutically acceptable carrier.

84. A composition according to claim 73, wherein R^2 of one said peptide is an alkanoic acid group and wherein an additional said peptide is linked to the same R^2 at the carboxyl terminus.

85. A composition comprising multiple peptides of the formula R^1 -Asp-Lys-Gly-X-Y-Leu-Pro-Arg-Pro-Thr-Pro-Pro-Arg-Pro-Ile-Tyr-X'-Y'- R^2 SEQ ID NO:1,

wherein R^1 is a moiety having a net positive charge;

wherein R^2 is selected from the group consisting of:

(a) a free hydroxyl, an amide, an imide, a sugar;

(b) a sequence of one or up to about 5 additional naturally occurring or unnatural amino acids, optionally substituted with a free hydroxyl, an amide, an imide or a sugar;

(c) a sequence of (b) wherein said additional amino acids cyclize the peptide by bridging between the N- and C-termini thereof; and

(d) a sequence of (b), wherein said additional amino acids link at least two said peptides;

wherein X and Y form a dipeptide selected from the group consisting of Ser-Tyr and a dipeptide formed of naturally occurring amino acids or unnatural amino acids, said dipeptide resistant to cleavage,

wherein X' and Y' form a dipeptide selected from the group consisting of Asn-Arg, and a dipeptide formed of naturally occurring amino acids or unnatural amino acids, said dipeptide resistant to cleavage.

86. The composition according to claim 85, which is a multiple antigenic peptide.

87. The peptide according to claim 1, which is fused to a second protein.

88. A composition according to claim 85, wherein R^2 of one said peptide is an alkanoic acid group and wherein an additional said peptide is linked to the same R^2 at the carboxyl terminus.

TOE02T" 40808860